

CLAIMS

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is as follows:

- 1 1. A virtual Point-of-Sale (POS) system for a retail store comprising:
2 a remote activator device carried by a sales associate;
3 a positioning system which recognizes a signal from the remote
4 activator device and determines where and how to find an appropriate blank
5 surface near the sales associate's actual location;
6 an integrated projector and camera assembly responsive to the
7 positioning system and which rotates to a correct position and displays a POS
8 application on a blank surface near the location of the sales associate, the
9 camera detecting entries in the POS application by the sales associate as
10 interactions with the displayed POS application;
11 a scanner used by the sales associate for scanning merchandise codes
12 to enter purchases in the displayed POS application; and
13 a magnetic stripe reader for reading a credit or debit card to complete
14 transaction in the displayed POS application.
- 1 2. The virtual Point-of-Sale (POS) system for a retail store recited in claim 1,
2 wherein said remote activator device, said scanner and said magnetic stripe
3 reader are each part of an integrated device carried by the sales associate.
- 1 3. The virtual Point-of-Sale (POS) system for a retail store recited in claim 2,
2 wherein in the integrated device further includes a printer for printing a sales
3 receipt.

1 4. The virtual Point-of-Sale (POS) system for a retail store recited in claim 1,
2 wherein the signal from the remote activator is a wireless signal conforming to
3 a standardized protocol.

1 5. The virtual Point-of-Sale (POS) system for a retail store recited in claim 1,
2 wherein the positioning system uses a positioning algorithm to determine
3 where and how to find a blank surface near the sales associate's actual
4 location.

1 6. The virtual Point-of-Sale (POS) system for a retail store recited in claim 1,
2 wherein the remote activator device transmits location information to the
3 positioning system for use in determining where and how to find a blank
4 surface near the sales associate's actual location.

1 7. The virtual Point-of-Sale (POS) system for a retail store recited in claim 1,
2 further comprising a back office computer connected to receive entries in the
3 POS application.

1 8. A method of operating a virtual Point-of-Sale (POS) system for a retail
2 store comprising the steps of:
3 transmitting an activation signal to a positioning device;
4 in response to the activation signal, determining by the positioning
5 device a source location of the activation signal;
6 moving by the positioning device a projector to project a virtual POS
7 display on a surface proximate to the source location; and
8 detecting entries for a transaction using the virtual POS display.

1 9. The method of operating a virtual Point-of-Sale (POS) system for a retail

2 store recited in claim 8, further comprising the steps of:
3 determining if payment is made by credit or debit card; and
4 if payment is made by credit or debit card, finalizing the transaction.

1 10. The method of operating a virtual Point-of-Sale (POS) system for a retail
2 store recited in claim 9, wherein if a payment is not made by credit or debit
3 card, further comprising the step of suspending the transaction for finalizing at
4 a check out desk.